

REQUEST FOR PATENT FEE REFUND

1 Date of Request: 9/6/022 Serial/Patent # 10/034,203

3 Please refund the following fee(s):

4 PAPER
NUMBER5 DATE
FILED

6 AMOUNT

Filing

\$

Amendment

\$

Extension of Time

\$

Notice of Appeal/Appeal

\$

☒ Petition

7

8/15/02

\$ 130.00

☒ Issue

\$

Cert of Correction/Terminal Disc.

\$

Maintenance

\$

Assignment

\$

Other

\$

7 TOTAL AMOUNT
OF REFUND

\$ 130.00

8 TO BE REFUNDED BY:

Treasury Check

Credit Deposit A/C #:

9

| | | | | | | |
|---|---|----|---|---|---|---|
| 0 | 3 | -- | 0 | 1 | 7 | 2 |
|---|---|----|---|---|---|---|

10 REASON:

☒ Overpayment☒ Duplicate Payment

No Fee Due (Explanation):

11 REFUND REQUESTED BY:

TYPED/PRINTED NAME: E. Shirene WillisTITLE: Petitions AttorneySIGNATURE: E. Shirene WillisPHONE: 308-6712OFFICE: Office of Petitions*****
THIS SPACE RESERVED FOR FINANCE USE ONLY:APPROVED: Alisa KellyDATE: 9/10/02

Instructions for completion of this form appear on the back. After completion, attach white and yellow copies to the official file and mail or hand-carry to:



#7

EXPRESS MAILING CERTIFICATE

"EXPRESS MAIL" Mailing Label No.: EL086172180US
Date of Deposit : 8-15-2002

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Office of Petitions, Washington, D.C. 20231

Typed or printed name of person signing this certificate:

BILL PATRICK
Signed: Bill Patrick

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|----------------------------|---|----------------------------------|
| In re application of |) | |
| Matko et al. |) | Examiner: Not yet assigned |
| |) | |
| Serial No.: 10/034,203 |) | Group: Not yet assigned |
| |) | |
| Filed: December 20, 2001 |) | |
| |) | |
| For: MOUNTING ASSEMBLY FOR |) | Attorney Docket No.: 28679/04047 |
| NIGHT VISION DISPLAY UNIT |) | |

RENEWED PETITION UNDER 37 C.F.R. § 1.53(e) ASSERTING THAT
DRAWINGS ARE NOT NECESSARY UNDER 35 U.S.C. § 113 (FIRST
SENTENCE) FOR A FILING DATE AND RESPONSE TO NOTICE OF
INCOMPLETE APPLICATION

Adjustment date: 09/12/2002 AKELLEY
08/16/2002 HVUONG1 00000073 10034203
01 FC:122 -130.00 OP

Asst. Commissioner for Patents
Office of Petitions
Washington, D.C. 20231

RECEIVED

SEP 06 2002

Repln. Ref: 09/12/2002 AKELLEY 0013350000
DAH:030172 Name/Number:10034203
FC: 704 \$130.00 CR

Dear Sir:

OFFICE OF PETITIONS

This is a Renewed Petition and Response requesting a filing date of December 20, 2001. On January 30, 2002, a Notice of Incomplete Non-Provisional Application was mailed to Applicants which stated that the application was deposited without drawings on December 20, 2001 and a filing date has not been granted. An earlier Petition was filed on February 13, 2002 by the prior counsel of record for the above referenced application in response to the Notice. The earlier Petition alleged that drawings had been filed and

08/16/2002 HVUONG1 00000073 10034203

01 FC:122 130.00 OP ,

additionally enclosed another copy of the drawings with the request that the December 20, 2001 filing date be granted. The U.S. Patent and Trademark Office ("PTO") mailed out a decision on May 28, 2002 dismissing Applicants February 13, 2002 Petition based on lack of sufficient evidence to establish with reasonable certainty that drawings were included with the application papers filed on December 20, 2001. The decision stated that Applicants were entitled to at least a February 13, 2002 filing date since drawings were enclosed with the earlier Petition.

This Renewed Petition is filed in response to the PTO's decision mailed on May 28, 2002 dismissing the earlier Petition and is filed in response to the Notice of Incomplete Non-Provisional Application mailed on January 30, 2002 to obtain a filing date of December 20, 2001.

Pursuant to this Renewed Petition and Response, Applicants respectfully request the grant of the December 20, 2001 filing date even if no drawings were submitted on the basis that no drawings are required. The invention is certainly fully and adequately disclosed within the meaning of the relevant statutes and regulations as set forth below.

M.P.E.P. § 608.02

It is stated in the Manual of Patent Examining Procedure (M.P.E.P.) § 608.02, Drawing: Handling of Drawing Requirements under the First Sentence of 35 U.S.C. § 113 (8th Edition), that, "An OIPE formality examiner should not treat an application without drawings as incomplete if drawings are not required. A drawing is not required for a filing date under 35 U.S.C. § 111 and 113 if the application contains . . . at least one process or method claim." Claims 20 and 21 in the above referenced application refer to a method of mounting a display unit. Since there is at least one method or process claim in the application, Applicants assert drawings are not required to obtain a filing date.

35 U.S.C. § 111

35 U.S.C. § 111 Application.

(a) IN GENERAL.

(1) WRITTEN APPLICATION. An application for patent shall be made, or authorized to be made, by the inventor, except as otherwise provided in this title, in writing to the Director.

(2) CONTENTS. Such application shall include

- (A) a specification as prescribed by section 112 of this title
- (B) a drawing as prescribed by section 113 of this title; and
- (C) an oath by the applicant as prescribed by section 115 of this title.

(3) FEE AND OATH. The application must be accompanied by the fee required by law. The fee and oath may be submitted after the specification and any required drawing are submitted, within such period and under such conditions, including the payment of a surcharge, as may be prescribed by the Director.

(4) FAILURE TO SUBMIT. Upon failure to submit the fee and oath within such prescribed period, the application shall be regarded as abandoned, unless it is shown to the satisfaction of the Director that the delay in submitting the fee and oath was unavoidable or unintentional. The filing date of an application shall be the date on which the specification and any required drawing are received in the Patent and Trademark Office.

Title 35 U.S.C. § 111 (a) states the filing date of an application shall be the date on which the specification and any drawing, as prescribed by section 113, are received in the Patent and Trademark Office. As set forth below, drawings are only required if the disclosure does not adequately describe the invention.

According to MPEP § 601.01(g), an amendment to the specification canceling all references to the omitted drawing figures, including any reference numerals, should be submitted to the assigned Examiner in response to an Office Action. A courtesy clean copy, with reference to drawings and reference numerals deleted, of the application is included with this Renewed Petition marked Exhibit A. The clean copy is not being submitted as an amendment because an Office Action has not been issued. The clean copy of the application is provided as evidence that the disclosure adequately describes the invention and that there is no insufficiency in the disclosure without reference to drawings.

35 U.S.C. § 113

35 U.S.C. § 113 Drawings.

The applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented. When the nature of such subject matter admits of illustration by a drawing and the applicant has not furnished such a drawing, the Director may require its submission within a time period of not less than two months from the sending of a notice thereof. Drawings submitted after the filing date of the application may not be used (i) to overcome any insufficiency of the specification due to lack of an enabling disclosure or otherwise inadequate disclosure therein, or (ii) to supplement the original disclosure thereof for the purpose of interpretation of the scope of any claim.

According to 35 U.S.C. § 113 (first sentence), “applicant shall furnish a drawing where necessary for the understanding of the subject matter sought to be patented.” In the case of Goldsmith v. Mihaly, 24 C.C.P.A. 1239, 90 F.2d 359 (C.C.P.A. 1937), Appellee Mihaly did not file any drawing with his specification presented to the PTO. During an interference proceeding between the two parties, the Examiner of Interferences stated, “Sec. 4889 of the Revised Statute while stating that the applicant shall furnish drawings when the nature of the case so admits, makes no statement as to when the drawings shall be furnished. While it is desirable that drawings shall be furnished when filing the other parts of the application in order to avoid any controversy as to new matter, no good reason is seen for not accepting subsequently filed drawings *nunc pro tunc* provided said drawings are supported by the originally filed parts of the application . . .” Id. at 1242.

The Court in Goldsmith held that the position taken by the Examiner of Interferences is sound as a matter of law. In addition, the Court held that the Primary Examiner found in the written specification, as originally filed and as the Court understands it, without reference to the drawings, what [the Primary Examiner] deemed to be ample disclosure. Id. at 1242-43.

For the above referenced application, Applicants assert that drawing figures are not necessary for the understanding of the invention due to the ample detailed description of the invention in the specification, and therefore drawing figures are not required to

obtain a filing date. The detailed description on pages 3-6 and the claims on pages 7-10 of Exhibit A shows an ample description of the invention.

Conclusion

Applicant respectfully requests favorable consideration of this Petition with respect to the above argument so that the application is accorded a December 20, 2001 filing date. Applicant submits the petition fee under 37 C.F.R. 1.17(i).

Attached is a check in the amount of \$130.00. If there are further fees due in connection with this matter, authorization is hereby made to charge the additional fees to deposit account 03-0172. A duplicate of this paper is attached.

It is respectfully requested, that upon grant of the petition under 37 C.F.R. 1.53(e), the petition fee be refunded by crediting deposit account 03-0172.

Respectfully submitted,

Date 8-15-02



Danielle A. Somrak
Reg. No. 50,991
Calfee, Halter & Griswold LLP
800 Superior Avenue, #1400
Cleveland, Ohio 44114-2688
(216) 622-8893

Exhibit A

MOUNTING ASSEMBLY FOR NIGHT VISION DISPLAY UNIT

Background of the Invention

[0001] This application relates to a night vision system, and more particularly to a new assembly for mounting a display unit.

[0002] There is an increased desire to incorporate night vision systems into heavy vehicles such as trucks, buses, and tractors. The night vision system provides an alternative means of improving visibility under difficult driving conditions such as night-time driving, low or no-light conditions, etc. For example, an infrared camera provides an alternative forward view from the truck cab and the view is fed to a display unit such as a heads-up display. The display unit is preferably mounted in the vehicle or cab compartment in a manner so that the driver's view of the road through the windshield is not impaired. One common manner of mounting a display unit is to use a pair of brackets disposed on opposite sides of the display unit where the brackets are secured to the vehicle dashboard. This provides a convenient location so that the driver easily sees the display unit. The brackets orient the display at a fixed angle relative to the driver so that there is no variability of the display unit.

[0003] Another desired location to mount the display unit is from the interior headliner of the truck cab. Heretofore, this has been difficult because of the need to accommodate a visor, storage compartments, etc. The visor function cannot be compromised and the heads up display must not introduce sharp edges or protrusions which could injure the driver. Although a swing-down hinge assembly has been suggested, it must still allow the sun visor to be deployed. Moreover, the display unit must not inadvertently swing down in a manner that would either startle or potentially bother the driver.

[0004] Accordingly, an improved mounting assembly for a night vision display unit is desired in a vehicle compartment.

Summary of the Invention

[0005] The preferred mounting assembly incorporates a friction hinge into the display unit that dampens movement of the display unit.

[0006] A preferred mounting assembly for the night vision display unit pivotally mounts the unit adjacent an upper region of a windshield. The display unit is movable between storage and deployed positions. Likewise, a visor is pivotally mounted in the vehicle compartment adjacent an upper region of the windshield. A catch secures at least one of the display unit and visor in its respective storage position.

[0007] A preferred catch assembly is a magnet mounted on a rear face of the display unit and a first striker or magnetically attractive member secured to the visor and a second striker mounted within the vehicle compartment. This allows the display unit to be maintained in a storage position when the visor is either in a deployed position or a storage position.

[0008] An existing truck cab can be easily modified to incorporate the night vision system. The display unit is hingedly secured within the compartment and incorporates a catch/magnet on the rear face thereof. The second part of the latch or striker is secured to the visor, as well as a second striker being secured to the headliner.

[0009] The present invention advantageously provides a simple, effective solution to the known problems.

[0010] The mounting assembly provides for effective adjustment of the desired orientation of the display unit.

[0011] The mounting assembly also advantageously provides for a heads-up display in the visor area without impinging on visor function.

[0012] The preferred mounting assembly also effectively stores the display unit during both the visor storage and deployed positions.

[0013] Still other advantages and benefits of the present invention will become apparent to those skilled in the art upon reading and understanding the following detailed description.

Detailed Description of the Preferred Embodiments

[0014] The following describes a preferred form of a video display unit associated with a night vision system. The display unit is a generally thin, rectangular structure that includes a display surface that is viewed by a vehicle operator via a pair of reflecting surfaces, namely, first fold mirror and a second surface or combiner. The combiner has an aspherical surface to provide an augmented view of the display surface as reflected from the first fold mirror. The image is viewed on the surface. A video input/output or multi-pin input provides a signal from a night vision camera (not shown) as displayed on screen. An on/off control knob and an intensity control knob are exemplary controls or switches that provide relatively simplified operation of the display unit. A deployment latch selectively holds the mirror portions in a planar, folded storage position and when the latch is opened, the mirror surfaces can be deployed to the angled positions.

[0015] Seat positions the operator relative to the dashboard to allow a clear, unobstructed view of the road ahead through windshield. In one embodiment, the display unit is mounted to the dashboard, a so-called heads down display (HDD). First and second adjustable mounting components or friction hinges to be described in greater detail below, are provided on opposite sides of the display unit along a common edge. These mounting components secure opposite edges of the display unit to the dashboard. The display unit can be tilted through a predetermined range of movement, although in use the display unit will engage the dashboard and the reflective mirrors provide an effective heads down display.

[0016] Alternatively, display unit is mounted adjacent a sun visor in a heads up display (HUD) format. In this embodiment, the visor and display unit are mounted adjacent the windshield, shown here as being hingedly or pivotally secured along one edge to the lower surface of a storage compartment or headliner. Either the visor or the display unit may be selectively deployed or stored. The visor is secured along a first edge to a pivot or hinge. A second or opposite edge of the visor is free to be rotated or pivoted downwardly from its storage position to the deployed position. The display unit meanwhile is secured along a first edge and mounted for rotational

movement about a pivot or hinge. A second or opposite edge is free to move through an arc about the hinge.

[0017] Thus the visor and display are both maintained in substantially horizontal, storage positions. The display unit is pivoted in a counterclockwise direction as illustrated to a generally vertical orientation. The display unit and night vision camera system provide for improved road visibility during low light conditions. Additionally, positioning the display unit in the region of the visor is preferred since it is a natural, ergonomic location that is easy for the operator to become accustomed to. During daylight operation, the display unit is easily rotated to the storage position.

[0018] If it is desired to deploy or use the visor, the display unit is first rotated to its position. Subsequently, the visor edge is rotated in a clockwise direction about the hinge to a deployed position. Thereafter, the display unit is rotated upwardly to its storage position. This conveniently moves the display unit out of the way and allows the visor to be operated in conventional fashion as desired. These steps are merely reversed to orient the visor to the storage position. That is, rotating the display unit downwardly then rotating the visor upwardly and further rotating the display unit upwardly orients both the visor and display unit in the storage positions.

[0019] The display unit is easily used in the heads up fashion. The visor and the display unit are oriented in mating, horizontal positions. The display surface is viewed with the assistance of the first fold mirror and the combiner. The visor is latched in a horizontal position to the rear of the display unit so that the visor does not interfere with the heads up display.

[0020] A friction hinge and hinge support are included with the display unit of the present invention. The hinge is secured with a fastener through a fastening opening. Thus, these friction hinges are secured at opposite sides of the display unit along one edge and cooperate with the hinge supports of to secure the display unit to the dashboard, or display unit along a lower surface of a storage compartment, headliner, or generally horizontal surface within the truck cab.

[0021] Since the display unit has a predetermined weight and will be subjected to the vibration and the rigors of road travel, a catch assembly is provided. In the preferred arrangement, the catch assembly includes first and second strikers or catch

plates secured to the headliner and first or inner face of the visor respectively. For example, the strikers or catch plates are formed of a ferrous material that cooperates with a catch member or magnet mounted to a rear face of the display unit. The magnet is magnetically engaged to the striker plate on the visor. Since the hinges of the visor and display unit, respectively, are located in spaced locations, this structural arrangement advantageously retains the visor and the display unit in their storage positions. A downwardly imposed force of sufficient magnitude to overcome the magnetic force allows the display unit to be swung downwardly. The visor is sufficiently lightweight that it will not inadvertently fall within or obstruct the driver's view through the windshield.

[0022] When the visor is deployed the display unit is then rotated upwardly to a generally horizontal stored position. There, the catch magnet on the rear face of the display unit engages the striker plate on the headliner. This assures that the display unit is maintained in the stored position and does not interfere with the driver's view of the road while simultaneously allowing the visor to be fully functional as desired.

[0023] Thus, the friction hinge of the present invention allows the display unit to be conveniently secured to the dashboard for selective orientation through a limited angle as illustrated by reference arrow. The friction hinge imposes sufficient force so that once the display unit is located at the desired angle it will dampen any further movement. Similarly, if the display unit is alternatively mounted to the headliner, the friction hinge and catch assembly assure that the display unit remains in its storage position with the visor or maintained in a storage position when the visor is deployed. This cooperation between the visor and display unit is easily adapted to a truck cab and does not adversely impact the conventional function or use of a visor, nor adversely impact the operation of the display unit.

[0024] The invention has been described with reference to the preferred embodiments. Obviously, modifications and alterations will occur to others upon reading and understanding the preceding detailed description. For example, the preceding specification refers to a magnet and striker/catch plate assembly for retaining the visor and display unit in desired positions. Other catch assemblies can be used with equal success and without departing from the scope and intent of the present invention.

Likewise, a catch assembly can be used with the heads down display to secure the display unit against the dashboard. If the catch assembly is inadvertently released, the provision of the friction hinge dampens potential movement of the display unit and precludes free-swinging movement that could startle the operator. It will also be appreciated that the magnet/catch assembly can be mounted at various locations on the display unit, vehicle cab, etc. It is intended that the invention be construed as including all such modifications and alterations in so far as they come within the scope of the appended claims or the equivalents thereof.

Having thus described the present invention, it is now claimed:

1. A mounting assembly for a night vision display unit in a vehicle compartment, the mounting assembly comprising:

a visor pivotally mounted in the associated vehicle compartment position adjacent an upper region of an associated windshield, the visor movable between a storage position and a use position;

a display unit pivotally mounted in the associated vehicle compartment position adjacent an upper region of an associated windshield, the display unit movable between a storage position and a deployed position; and

a first catch for securing at least one of the display unit and visor in their respective storage positions.

2. The mounting assembly of claim 1 further comprising a second catch for securing the display unit in the storage position when the visor is deployed.

3. The mounting assembly of claim 1 wherein the first catch includes a magnet disposed on one of the visor and the display unit, and a striker mounted on the other of the visor and display unit.

4. The mounting assembly of claim 3 wherein the striker is mounted in the vehicle compartment for securing the display unit in a storage position when the visor is in a use position.

5. The mounting assembly of claim 1 wherein the visor includes a hinge along one edge disposed adjacent the windshield.

6. The mounting assembly of claim 5 wherein the display unit includes a hinge along one edge disposed in spaced relation from the windshield.

7. The mounting assembly of claim 1 wherein the first catch includes a magnet secured to one face of the display unit opposite a display face of the display unit.

8. The mounting assembly of claim 7 wherein the visor includes a striker secured to a first face of the visor that faces outwardly when the visor is disposed in the storage position.

9. The mounting assembly of claim 1 wherein the display unit includes a friction hinge that dampens the display unit in a desired orientation between the storage and deployed positions.

10. A mounting assembly for securing a night vision display in a vehicle compartment, the mounting assembly comprising:

a night vision display unit pivotally mounted in the associated vehicle compartment; and

a friction hinge that dampens movement of the display unit.

11. The mounting assembly of claim 10 further comprising a striker and a magnet assembly for retaining the display unit in a stored position.

12. The mounting assembly of claim 11 wherein the magnet is secured to a non-display face of the display unit and the striker is secured to the vehicle compartment.

13. The mounting assembly of claim 12 further comprising a second striker secured to a visor for retaining the display unit in a stored position.

14. The mounting assembly of claim 13 wherein the visor is pivotally secured in the vehicle compartment along a hinge mounted adjacent the windshield and the night vision display unit is pivotally secured in the vehicle compartment along a hinge mounted in spaced relation to the windshield.

15. The mounting assembly of claim 10 further comprising a visor pivotally mounted in the vehicle compartment for selective movement between storage and deployed positions, the display unit adapted to overlay the visor when both the visor and the display unit are in the stored positions.

16. The mounting assembly of claim 15 wherein hinges of the visor and the display unit, respectively, are located along opposite edges allowing the display unit and visor to overlap when disposed in their respective stored positions.

17. The mounting assembly of claim 15 further comprising a catch assembly having a first component on the display unit and a second component on the visor.

18. The mounting assembly of claim 17 wherein the first component is a magnet secured to the display unit and the second component is a striker secured to the visor.

19. The mounting assembly of claim 18 wherein the catch assembly further comprises a second striker in the vehicle compartment that selectively engages the magnet on the display unit when the visor is deployed and the display unit is located in the stored position.

20. A method of mounting a display unit in a vehicle compartment that allows the display unit to be used without interfering with operation of the visor comprising the steps of:

incorporating a friction hinge into the display unit; and
securing the display unit in the vehicle compartment with a bracket that receives the hinge.

21. The method of claim 20 comprising the further steps of securing a first striker to a face of a visor; securing a magnet to a face of the display unit for selective engagement with the first striker; and securing a second striker in the vehicle

compartment for selective engagement with the magnet when the visor is deployed for use.

MOUNTING ASSEMBLY FOR NIGHT VISION DISPLAY UNIT

Abstract of the Disclosure

A mounting assembly for a night vision display unit uses friction hinges to effectively position the display unit at a desired position relative to the vehicle operator. In a dashboard mounting arrangement, the friction hinge dampens movement of the display unit. In the visor mounted arrangement, the friction hinge assembly and catch assembly ensure convenient, effective storage and deployment of the visor or display unit without one component adversely impacting on the operation and use of the other component.